

'Essays' are now out of date, that we have introduced Science into the schools and got what he asked for. It is not so. In fact, we have only the shadow—not the substance. The teaching, for the most part, is of the kind he abhorred and knew to be useless." "Huxley was undoubtedly a man of very great innate ability, a man who had gained full grasp of the world; he saw very clearly what the needs were, but was no master of method. Cannot men be found to study his great example but go further, especially in developing methods?" Prof. Armstrong said that it is in connexion with medical education that Huxley's instructions have been least regarded. Huxley complained specifically of the unsatisfactory character of the teaching in physiology and asked for a proper scientific foundation at school, followed by a minimum burden during the period of professional training.

HUXLEY'S efforts to secure public recognition of the value of scientific education, said Prof. Armstrong, led to the establishment of the City and Guilds of London Institute for the Advancement of Technical Education and of its two colleges, the Finsbury Technical College (1879) and the Central Technical College (1884). The latter is now known as the City and Guilds (Engineering) College, and forms part of the Imperial College of Science and Technology. In an address on "Science and Culture", Huxley defended the thesis that for the purpose of attaining real culture an exclusively scientific education is at least as effectual as an exclusively literary education—to which Prof. Armstrong replies that he does not believe that either in itself can give us culture or is, in fact, possible exclusively. "The world insists on teaching a good deal, however much the schools may fail to teach." But Huxley made an important recommendation: that provision should be made for teaching sociology. Already in 1887 he foresaw the coming gravity of our industrial position, and wrote a remarkable letter to the *Times*. He called upon the nation to 'organise victory', and Prof. Armstrong echoed his words. A nation of shopkeepers, we have, he says, worshipped technical education; unfortunately, it has not taught us to keep shop: only to make things to be sold but not how to sell them, to the general good, when made. The problem of food looms in full face of a present need; that our food supply must be our first care is as yet realised by few. We can no longer allow uncontrolled use of the soil. We must learn how to use our knowledge. Scientific workers must bestir themselves to educate the public, even as Prof. Armstrong educates while he castigates.

New Medals of the Royal Aeronautical Society

Two new medals have been founded by the Royal Aeronautical Society, to be known as the British Gold Medal for Aeronautics and the British Silver Medal for Aeronautics. These medals have been founded following a request from Lord Amulree, when Secretary of State for Air, that the Royal Aeronautical Society should give some award for

outstanding feats in aviation. A permanent Committee has been appointed to consider the awards of the medals, consisting of six members of the Royal Aeronautical Society, and the chairmen of the Royal Aero Club and the Air League of the British Empire. The design of the Gold Medal incorporates a portrait of Sir George Cayley and his first model aeroplane of 1804, and the design of the Silver Medal incorporates the Henson and Stringfellow machines. The medals will be awarded for an achievement leading to advancement in aeronautical science and will be confined, so far as possible, to subjects of the British Empire, but other nationals will not be excluded. The expenses of founding these two medals have been defrayed by the president, Mr. C. R. Fairey. The first awards of the British Silver Medal for Aeronautics have been made for the following achievements which have led to advances in aeronautical science: Capt. C. F. Uwins, for reaching a world record height in a heavier-than-air craft of 43,976 ft. on September 16, 1932; Squadron Leader O. R. Gayford, and Flight-Lieut. G. E. Nichollets, who flew from Cranwell, England, to Walvis Bay, South Africa, non-stop on February 6–8, 1933, a distance of 5,340 miles.

Excavations in Northern Mesopotamia

EXPECTATION of the importance of the results likely to be obtained by the joint expedition of the British Museum and the British School of Archaeology in Iraq to Tell Arpachiyah in northern Mesopotamia under Mr. M. E. L. Mallowan is fully confirmed by the report of the first half season's work which appears in the *Times* of May 5. The expedition left London in January. It will be remembered that this site was selected for excavation as the result of a preliminary reconnaissance from Nineveh in the previous year. Surface finds of painted potsherds then suggested that this site would probably prove of great importance to the little-known earlier prehistory of northern Mesopotamia. The discovery of pottery of the Ur and Tell el-Ubaid type in mud-brick dwellings of a humble character on the top of the mound carries the first settlement well back into the fifth millennium B.C., and proves the site to be among the oldest yet discovered in Mesopotamia. As excavation proceeds, Arpachiyah is shown to be the centre of convergence for peoples transitional between neolithic and chalcolithic times; while connexions are being traced with Anatolia, Syria, southern Mesopotamia and, through Persia, with Baluchistan. It may be noted, in passing, that Arpachiyah supports and extends the evidence obtained by the American School of Oriental Research at Tepe Gawra and Tell Billa that northern Mesopotamia was a place of settlement for peoples from the north and north-east, who were there subjected to strong cultural influences from the south. Among the more noteworthy discoveries now reported at Arpachiyah are a method of fractional burial which is compared with the practice on the prehistoric site of Nal in Baluchistan, the use of a bucranium or ox's head as a motif to an extent which suggests a special cult,

female figurines pointing to affinities with the Anatolian mother-goddess, a variety of beads and amulets, and a store of wheat, the earliest probably in Mesopotamia. Excavations are being carried through the lower levels in the hope of reaching virgin soil.

Road Research Station, Harmondsworth

IN accordance with a recommendation of the Select Committee on Estimates of the House of Commons in its Second Report for 1932, arrangements have been made for the Road Research Station at Harmondsworth to be transferred from the Ministry of Transport to the Department of Scientific and Industrial Research as from April 1 last. The Committee of the Privy Council for Scientific and Industrial Research has decided to appoint a Road Research Board to advise generally on the conduct of road research undertaken by the Department, and with the concurrence of the Ministry of Transport, has appointed Major F. C. Cook, deputy chief engineer, Roads Department, Ministry of Transport, to be the first chairman of the Board. The following gentlemen have accepted invitations to serve on the Board:—Prof. R. G. H. Clements, Mr. T. Pierson Frank, Mr. W. J. Hadfield, Mr. W. P. Robinson, Prof. C. G. Cullis, Mr. E. V. Evans, Prof. E. H. Lamb, Prof. C. H. Lees, Lieut.-Col. Mervyn O'Gorman, and Dr. T. Franklin Sibby. The immediate direction and control of road research undertaken by the Department of Scientific and Industrial Research will be in the hands of Dr. R. E. Stradling, director of building research under the Department. Road tests throughout Great Britain under normal traffic conditions will continue, as heretofore, to be carried out by the Ministry of Transport in conjunction with the responsible highway authorities. In connexion with these tests, as well as the research work at the laboratory, and the issue of reports thereon, arrangements have been made for the closest collaboration between the Ministry of Transport and the Department of Scientific and Industrial Research.

Science Teaching

IN connexion with the notice of Badcock and Holmyard's "Electricity and Magnetism for Beginners" in *NATURE* of March 11, Dr. Dorothy Turner protests against the suggestion that a good qualitative treatment may involve the danger of dulling the pupils' subsequent interest in the subject when the time comes for more complete quantitative treatment, on the ground that for ninety-five per cent of those attending State-aided secondary schools such a time never comes. We referred Dr. Turner's letter to the reviewer who, however, still maintains that the essential danger to which teachers of science will have to give serious consideration is that, in the otherwise laudable desire to extend the ground covered, anything worthy to be called a training in science may be superseded by just talking about science, with the consequence that the subject may become little more than a branch of English, providing good topics for general knowledge essays.

Rockefeller Gift to the Royal Institution

IT was announced by the Managers of the Royal Institution at the general monthly meeting of the members, held on May 8, that the capital payment of £20,000 promised by the Rockefeller Foundation nearly three years ago, on condition of obtaining £50,000 from other sources, had now been received. The gift was promised for the endowment of research in the Davy Faraday Research Laboratory of the Royal Institution, and the fulfilment of the Rockefeller promise implies that in the past three years the Managers have been successful in securing research endowment for the Laboratory to a total capital value of upwards of £70,000.

Spurious University Degrees

A BILL to prohibit the unauthorised use and issue of university degrees, a subject which has been taken up by the Association of Scientific Workers, was introduced into the House of Lords by Lord Jessel on May 3 and read a first time. The main part of the Bill, which, if passed, will be known as the University Spurious Degrees (Prohibition of Use and Issue) Act, proposes to make it a penal offence for any person to use letters after his name denoting a university degree unless he actually holds such a degree; and also it prohibits the conferment of degrees by any person or organisation other than a recognised university. The term "recognised university" is defined at length; briefly, it may be described as a university or similar institution granting academic degrees as a result of a prescribed course of at least three years' training or definitely recognised as a university by the government of the country where it is situated. The "Lambeth degrees" conferred by the Archbishop of Canterbury are definitely exempted from the provisions of the Act.

Californian Earthquake of March 10

THIS earthquake has been studied by Messrs. H. O. Wood and C. F. Richter, seismologists of the Pasadena Seismological Laboratory, and a summary of their results appears in the Mail Report of Science Service, Washington, D.C. for April 19. The intensity of the shock was far less than that of the Nevada earthquake of November 20–21, and may have been less than that of the Santa Barbara earthquake of June 29, 1925. The greater loss of life (about 120 persons) and property caused by the recent shock is attributed to the strongly shaken area being more thickly settled. In some places, considerable destruction occurred and this was probably due to the water-soaked alluvial nature of the ground; but, in all, serious damage was confined to bad or improperly designed construction. The study of the records of seven seismographs in California under the charge of the Pasadena Laboratory shows that the origin of the earthquake was probably in one of a system of faults that runs parallel to the coast in the district between Huntington Beach and Newport Beach. The depth of the focus seems to have been less than usual and was probably about six miles. Nearly continuous